## AMENDMENT TO THE SPECIFICATION

Please replace in the specification, the paragraph on page 40, line 13 - line 20 with the following paragraph:

Referring back to **Figure 8D**, section **881** consists of the aggressor net **811d** surrounded by victim nets **831d** and **821d**. **Figure 9A** illustrates a detailed view of how the interconnect wires of section **881** may appear. Capacitance is a physical attribute that is determined by the size, shape, and proximity of conductive materials. The capacitance problem of **Figure 9A** can be defined by the length of the section **L**, the width of each wire section ($W_0$, $W_1$, and $W_2$), the distance between the victim wire **931** and the aggressor wire **911** ($S_1$), and the distance between the victim wires **921** and the aggressor wire ~~**911** ($S_3$).~~ **911** ($S_2$).

Please replace in the specification, the paragraph on page 41, line 4 - line 13 with the following paragraph:

**Figure 9B** illustrates a two-dimensional cross section of the capacitance problem of **Figure 9A**. A two-dimensional field solver can be used to solve the two-dimensional capacitance problem of **Figure 9B**. The output of the capacitance extraction is the capacitance between the aggressor wire and the first victim wire $C_{01}$, the capacitance between the aggressor wire and the ~~first~~ second victim wire $C_{02}$, and the capacitance between the aggressor wire and the ground plane $C_0$. Thus, the capacitance problem for sections having the two-dimensional profile of **Figures 9A** and **9B** can be expressed in terms of five input variables ($W_0$, $W_1$, $W_2$, $S_1$, and $S_2$) and three output values ($C_{01}$, $C_{02}$, and $C_0$). The different output values are often added together and expressed as a single capacitance value **C**.

Please replace in the specification, the paragraph on page 42, line 1 - line 7 with the following paragraph:

The vertical distance between the different metal layers affects the capacitance calculation. However, the vertical distance between the different metal layers in a particular semiconductor process is a fixed constant value. Thus, in a model ~~is~~ built specifically for a particular semiconductor process and metal layer, the vertical distance may be ignored since it does not vary. Therefore, the capacitance problem for sections having the profile illustrated in **Figure 10** has nine input variables ($W_0$, $W_1$, $W_2$, $W_3$, $W_4$, $S_1$, $S_2$, $S_3$, and $S_4$) and five output values, not shown in **Figure 10** ($C_{01}$, $C_{02}$, $C_{03}$, $C_{04}$, and $C_0$), where $C_{on}$ is the capacitance between the aggressor wire and the nth victim wire.

Please replace in the specification, the paragraph on page 42, line 9 - line 16 with the following paragraph:

**Figure 11** illustrates yet an even more complex capacitance extraction problem. The capacitance extraction for the profile of **Figure 11** must take into account the capacitance effects from two interconnect wires on the same metal layer (**1120**, or **1130**), two interconnect wires on a higher metal layer (**1160**, or **1170**), and two interconnect wires on a lower metal layer (**1180**, or **1190**). The capacitance problem for sections having the profile of **Figure 11** has thirteen input variables ($W_0$, $W_1$, $W_2$, $W_3$, $W_4$, $W_5$, $W_6$, $S_1$, $S_2$, $S_3$, $S_4$, $S_5$, and $S_6$) and seven output values, not shown in **Figure 11** ($C_{01}$, $C_{02}$, $C_{03}$, $C_{04}$, $C_{05}$, $C_{06}$, and $C_0$), where $C_{on}$ is the capacitance between the aggressor wire and the nth victim wire.